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10/010,270	12/06/2001	Harold J. Plourde JR.	60374.0040US02/A-7182	5626
62658 7590 10/13/2009 MERCHANT & GOULD SCIENTIFIC ATLANTA, A CISCO COMPANY P.O. BOX 2903 MINNEAPOLIS, MN 55402-0903			EXAMINER NGUYEN BA, HOANG VU A	
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			2421	
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

**Application No.**

10/010,270

**Applicant(s)**

PLOURDE ET AL.

**Examiner**

Hoang-Vu A. Nguyen-Ba

**Art Unit**

2421

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 19 June 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3 and 5-47 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 5-47 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____.                                     |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____.   | 6) <input type="checkbox"/> Other: _____.                         |

### **DETAILED ACTION**

1. This action is responsive to the Pre-Brief Appeal Conference request filed on June 19, 2009 and the decision thereafter mailed on August 10, 2009.
2. Claims 1-3 and 5-47 are pending. Claims 1, 23, 24 and 46 are independent claims.

### ***Response to Arguments***

3. Applicants' arguments have been fully considered and they are persuasive. Therefore, the rejection has been withdrawn.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 1-3 and 5-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application Publication No. 2002/0040475 by Yap et al. ("Yap").

It is noted that hereinafter the use of the clause "see at least" should be interpreted that the cited portions/figures that follow the clause are not the only portions/figures or embodiments that are considered to be relevant. Should Applicant find that the cited portions/figures are not relevant, other portions of the disclosure/figures or embodiments of the prior art reference will be provided as additional evidence of and/or context to the relevancy of the previously cited portions/figures as may be necessary. Since the evidence is from the same reference, the introduction of the additional evidence in response to Applicant's arguments should not therefore be construed as that of new grounds of rejection.

### **Claim 1**

Yap discloses *a system* (see at least FIGs. 1-2, 6-9) *for managing the allocation*

*and storage of media content instance files in a hard disk of a storage device coupled to a media client device in a subscriber television system, comprising:*

*a memory for storing logic* (see at least FIGs. 6, 8-9, HDD 320; it is noted that a hard disk or HDD is commonly known to store executable application programs);

*a buffer space in the SDRAM 315 for buffering media content instances as buffered media content instance files* (see at least FIG. 7, elements 315-16); and

*a processor* (see at least FIGs. 6, 8-9, element 310) *configured with the logic to track the size of permanent media content instance files and the buffered media content instance files to provide indication of available free space* (see at least FIGs. 21a-e; 22a-c; 23a-c).

Yap does not explicitly disclose that the buffer space is in the hard disk. However, the decision of whether to locate the SDRAM 315 with buffer space 316 inside or separate from the hard disk HDD 320 (e.g., FIGs. 6, 8-9) is a matter of design choice, one of which may be the choice and the advantage of integrating the SDRAM with the HDD to help improve the compactness and reliability of the design.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify Yap by integrating the SDRAM with the HDD for the purpose discussed above.

## **Claim 2**

The rejection of base claim 1 is incorporated. The modified Yap further discloses *wherein the processor is further configured with the logic to provide a user interface, responsive to a user input, wherein the user interface provides the indication of available free space for permanently recording media content instances, wherein the permanently recorded media content instances are configured as the permanently recorded media content instance files* (see at least FIGs. 21a-e; 22a-c; 23a-c; 24).

**Claim 3**

The rejections of base claim 1 and intervening claim 2 are incorporated. The modified Yap further discloses *wherein the permanently recorded media content instance files can be deleted from the storage device* (FIGs. 24; 30c; 32c).

**Claim 4** (previously canceled)

**Claim 5**

The rejections of base claim 1 and intervening claim 2 are incorporated. The modified Yap further discloses *wherein the permanently recorded media content is from the buffer space* (see at least FIGs. 8-9, 14-15; arrow from SDRAM to HDD).

**Claim 6**

The rejections of base claim 1 and intervening claim 2 are incorporated. The modified Yap further discloses *wherein the permanently recorded media content is a scheduled recording initially written to non-buffer space* (see at least FIGs. 21a-e).

**Claim 7**

The rejection of base claim 1 is incorporated. The modified Yap further discloses *wherein the buffer space, the available free space, and permanently recorded space are located on the hard disk* (see at least FIGs. 21a-e).

**Claim 8**

The modified Yap further discloses *wherein the buffer space and permanently recorded space are allocated from the free space on the hard disk* (see at least FIGs. 21a-e).

**Claim 9**

The rejection of base claim 1 is incorporated. The modified Yap further discloses *wherein the buffer space and permanently recorded space have physical locations on the hard disk* (see at least FIGs. 21a-e).

**Claim 10**

The rejection of base claim 1 is incorporated. The modified Yap further discloses *wherein the buffer space and the available free space is measured in units of time* (see at least FIGs. 21d-e).

**Claim 11**

The rejection of base claim 1 is incorporated. The modified Yap further discloses *wherein the buffer space and the available free space is measured in units of hard disk space* (see at least FIGs. 21a-b).

**Claim 12**

The rejection of base claim 1 is incorporated. The modified Yap further discloses *wherein the processor is further configured with the logic to convert analog broadcast media content instances, received at a communications interface, into digitally compressed media content instances stored in a buffer* (see at least [0007]).

**Claim 13**

The rejection of base claim 1 is incorporated. The modified Yap further discloses *wherein the processor is further configured with the logic to buffer an analog signal received at a connector from a consumer electronics device, as a digitally compressed media content instance* (see at least [0007]).

**Claim 14**

The rejection of base claim 1 is incorporated. The modified Yap further discloses *wherein the processor is further configured with the logic to buffer digital broadcast media content instances, received at a communications interface, as digitally compressed media content instances* (see at least FIG. 6, SDRAM 335).

**Claim 15**

The rejection of base claim 1 is incorporated. The modified Yap further discloses *wherein the processor is further configured with the logic to buffer digital media-on-demand media content instances, received at a communications interface from a remote server, as digitally compressed media content instances* (see at least FIG. 6, SDRAM 335).

**Claim 16**

The rejection of base claim 1 is incorporated. The modified Yap further discloses *wherein the processor is further configured with the logic to buffer digital media content instances, received at a digital communications port from a local network, as digitally compressed media content instances* (see at least [0007], e.g., “received compressed video and audio”).

**Claim 17**

The rejection of base claim 1 is incorporated. The modified Yap further discloses *wherein the processor is further configured with the logic to buffer digital media content instances, received at a digital communications port from a local device, as digitally compressed media content instances* (see at least [0006], e.g., STB connected to a satellite dish).

**Claim 18**

The rejection of base claim 1 is incorporated. The modified Yap further discloses *wherein the processor is further configured with the logic to determine the available free space after subtracting buffer space capacity from total disk space* (see at least FIG. 21a).

**Claim 19**

The rejection of base claim 1 is incorporated. The modified Yap further discloses *wherein the processor is configured with the logic to reduce the available free space by the amount of the space used for the permanent media content instance files* (see at least FIG. 21a; the initial free available space 100% is being reduced to 70% by the amount of space used 30%).

**Claim 20**

The rejection of base claim 1 is incorporated. The modified Yap further discloses *wherein the processor is configured with the logic to increase the available free space by the amount of the space recovered from a deleted permanent media content instance files* (FIGs. 21a-b; FIG. 24, option 545; FIG. 30c; with the erase options in FIGs. 24 and 30c, the logic to calculate the amount of free available space in FIG. 21a will increase the free available space).



**Claim 21**

The rejection of base claim 1 is incorporated. The modified Yap further discloses *wherein the indication of the free space available is configured in time of space available for the permanent media content instance files* (see at least FIGs. 21c-e; 22a-c; 23a).

**Claim 22**

The rejection of base claim 1 is incorporated. The modified Yap further discloses *wherein the free space indication is unaffected by writes to and deletions from the buffer space* (see at least FIGs. 8-9; [0176]; [0178]).

**Claim 23**

Since Claim 23 is an independent claim that is a combination of Claims 1-22, the respective rejections are thus applied.

***Claim Rejections – 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejection under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for the purposes of this subsection of an application filed in the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 24-47 are rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent Application Publication No. 2002/0040475 by Yap et al. (“Yap”).

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It should be noted that hereinafter the use of the clause “see at least” should be interpreted that the cited portions that follow the clause are not the only portions or descriptions of embodiments that are considered to be relevant. Should Applicant find that the cited portions are not relevant, other portions of the disclosure of the prior art reference will be provided as additional evidence and/or context to the relevancy of the previously cited portions. Since the evidence is from the same reference, the introduction of the additional evidence in response to Applicant’s arguments should not therefore be considered to be that of new grounds of rejection.

**Claim 24**

Yap discloses:

*buffering media content instances into buffer space as buffered media content instance files* (see at least FIGs. 6, 8-9, SDRAM 315; [0176]; [0178]);

*tracking the size of permanent media content instance files* (see at least 21a-e; 22a-c; 23a; 24, items 543, 544) *and buffered media content instance files* (see at least FIGs. 8-9, [0334], e.g., the claimed tracking is interpreted to read on “[w]hen a sufficient amount of programming data has been accumulated in the SDRAM 315, the host processor 310 transfers the data from the SDRAM 315 to the HDD 320 for recording therein”); and

*providing an indication of available free space such that the indication is independent of the buffer space* (see at least FIGs. 21a-e; it should be noted that the available free space is of the HDD which is independent of the buffer 315).

**Claim 25**

The rejection of base claim 24 is incorporated. Since Claim 25 relates to the same same feature (without the incorporated features of Claim 1) recited in Claim 2, the same portion of Yap applied in the rejection of claim 2 is deemed applicable to claim 25.

**Claim 26**

The rejections of base claim 24 and intervening claim 25 are incorporated. Since Claim 26 relates to the same feature (without the incorporated features of Claim 1) recited in Claim 3, the same portion of Yap applied in the rejection of claim 3 is deemed applicable to claim 26.

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**Claim 27**

The rejections of base claim 24 and intervening claim 25 are incorporated. Since Claim 27 relates to the same feature (without the incorporated features of Claim 1) recited in Claim 4, the same portion of Yap applied in the rejection of claim 4 is deemed applicable to claim 27.

**Claim 28**

The rejections of base claim 24 and intervening claim 25 are incorporated. Since Claim 28 relates to the same feature (without the incorporated features of Claim 1) recited in Claim 5, the same portion of Yap applied in the rejection of claim 5 is deemed applicable to claim 28.

**Claim 29**

The rejections of base claim 24 and intervening claim 25 are incorporated. Since Claim 29 recites relates to the same feature (without the incorporated features of Claim 1) recited in Claim 6, the same portion of Yap applied in the rejection of claim 6 is deemed applicable to claim 29.

**Claim 30**

The rejection of base claim 24 is incorporated. Since Claim 30 relates to the same feature (without the incorporated features of Claim 1) recited in Claim 7, the same portion of Yap applied in the rejection of claim 7 is deemed applicable to Claim 30.

**Claim 31**

The rejection of base claim 24 is incorporated. Since Claim 31 relates to the same feature (without the incorporated features of Claim 1) recited in Claim 8, the same portion of Yap applied in the rejection of claim 8 is deemed applicable to Claim 31.

**Claim 32**

The rejection of base claim 24 is incorporated. Since Claim 32 relates to the same feature (without the incorporated features of Claim 1) recited in Claim 9, the same portion of Yap applied in the rejection of claim 9 is deemed applicable to Claim 32.

**Claim 33**

The rejection of base claim 24 is incorporated. Since Claim 33 relates to the same feature (without the incorporated features of Claim 1) recited in Claim 10, the same portion of Yap applied in the rejection of Claim 10 is deemed applicable to Claim 33.

**Claim 34**

The rejection of base claim 24 is incorporated. Since Claim 34 relates to the same feature (without the incorporated features of Claim 1) recited in Claim 11, the same portion of Yap applied in the rejection of Claim 11 is deemed applicable to Claim 34.

**Claim 35**

The rejection of base claim 24 is incorporated. Since Claim 35 relates to the same feature (without the incorporated features of Claim 1) recited in Claim 12, the same portion of Yap applied in the rejection of claim 12 is deemed applicable to claim 35.

**Claim 36**

The rejection of base claim 24 is incorporated. Since Claim 36 relates to the same feature (without the incorporated features of Claim 1) recited in Claim 13, the same portion of Yap applied in the rejection of Claim 13 is deemed applicable to Claim 36.

**Claim 37**

The rejection of base claim 24 is incorporated. Since Claim 37 relates to the same feature (without the incorporated features of Claim 1) recited in Claim 14, the same portion of Yap applied in the rejection of claim 14 is deemed applicable to Claim 37.

**Claim 38**

The rejection of base claim 24 is incorporated. Yap further discloses *buffering digital media-on-demand media content instances, received at a communications interface from a*

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*remote server, as digitally compressed media content instances (see at least [0006-0007]; FIG. 6, SDRAM 335).*

**Claim 39**

The rejection of base claim 24 is incorporated. Yap further discloses *buffering digital media content instances, received at a digital communications port from a local server, as digitally compressed media content instances (see at least [0006-0007]; FIG. 6, SDRAM 335).*

**Claim 40**

The rejection of base claim 24 is incorporated. Yap further discloses *buffering digital media content instances, received at a digital communications port from a local device, as digitally compressed media content instances (see at least [0006-0007]; FIG. 6, SDRAM 335).*

**Claim 41**

The rejection of base claim 24 is incorporated. Since Claim 41 relates to the same feature (without the incorporated features of Claim 1) recited in Claim 18, the same portion of Yap applied in the rejection of claim 18 is deemed applicable to Claim 41.

**Claim 42**

The rejection of base claim 24 is incorporated. Since Claim 42 relates to the same feature (without the incorporated features of Claim 1) recited in Claim 19, the same portion of Yap applied in the rejection of claim 19 is deemed applicable to Claim 42.

**Claim 43**

The rejection of base claim 24 is incorporated. Since Claim 43 relates to the same feature (without the incorporated features of Claim 1) recited in Claim 20, the same portion of Yap applied in the rejection of claim 20 is deemed applicable to Claim 43.

**Claim 44**

The rejection of base claim 24 is incorporated. Since Claim 44 relates to the same

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feature (without the incorporated features of Claim 1) recited in Claim 21, the same portion of Yap applied in the rejection of claim 21 is deemed applicable to Claim 44.

**Claim 45**

The rejection of base claim 24 is incorporated. Since Claim 45 relates to the same feature (without the incorporated features of Claim 1) recited in Claim 24, the same portion of Yap applied in the rejection of claim 24 is deemed applicable to Claim 45.

**Claim 46**

Since Claim 46 is an independent claim that is a combination of Claims 24-45, the rejections of these claims are thus applied.

**Claim 47**

The rejection of base claim 1 is incorporated. Yap does not specifically disclose *wherein the processor is further configured with the logic to provide an indication that insufficient free space is available for a requested recording*. However, the claimed feature is deemed inherent to the teaching of Yap, which allows the DVR to be set to display the program length and the record time available (see at least FIG. 18, item 530 and FIGs. 23a-c), in the instance when the program length shows 30 minutes and the recording time available shows less than 30 minutes.

***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to Applicant's disclosure.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hoang-Vu "Antony" Nguyen-Ba whose telephone number is (571) 272-3701. The examiner can normally be reached on Monday-Friday from 9:00 am to 5:30 pm.

If attempts to reach the examiner are unsuccessful, the examiner's supervisor, John Miller can be reached at (571) 272-7353.

The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application should be directed to the TC 2400 Group receptionist (571) 272-2400.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at (866) 217-9197 (toll-free).

/Hoang-Vu Antony Nguyen-Ba/

Primary Examiner, Art Unit 2421

October 12, 2009